

Upper San Joaquin River Basin Storage Investigation Public Workshop Summary

July 15, 2004

Introduction

This summary describes the proceedings of the Upper San Joaquin River Basin Storage Investigation (Investigation) Public Workshop held on July 15, 2004 in Fresno, California. Facilitator Charles Gardiner explained the purposes of this workshop were to review progress, seek public input, and discuss the next steps in the Investigation. Agenda topics included:

- Investigation Overview
- Conjunctive Management/ Groundwater Storage
- Surface Storage Option Screening
- Hydropower Considerations
- Flood Development Reduction Evaluation
- Development of Operational Scenarios
- Next Steps

Presentation materials from the workshop are available on the project website:

<http://www.usbr.gov/mp/scca0/storage/> .

Investigation Overview

Bill Swanson reviewed the Phase 1 findings, summarized the public scoping process and outlined the Investigation's next steps, including a feasibility study and an Environmental Impact Statement/Environmental Impact Report (EIS/EIR). Phase 1, completed in October 2003, identified 16 site-specific surface storage options and narrowed the range of options to be further studied to six, including: Friant Dam Raise, Temperance Flat Reservoir (Sites River Mile [RM] 274, RM279, and RM286), Fine Gold Creek Reservoir, and Yokohl Valley Reservoir. The public scoping process consulted stakeholders and regulatory agencies and consisted of public scoping meetings and a comment period. A scoping report is expected to be available in late summer or early fall 2004. The project team is currently formulating alternatives for the Draft EIS/EIR, which is scheduled to be complete in fall 2007.

Participants' comments and questions (*hereafter presented in italics*) about the Investigation purpose and process included:

- *Did pump-back analyses reflect canal capacity limitations?*
- *What criteria were considered in water quality evaluations?*
- *Did the analyses assume current operations at Millerton Reservoir?*
- *Would including carry-over storage change the yield curve?*
- *What is the overall study cost?*

Conjunctive Management and Groundwater Storage

Mark Cowin, California Department of Water Resources (DWR), summarized the current efforts and findings of the Conjunctive Management and Groundwater Storage evaluation. The purpose of the evaluation is to evaluate groundwater options in the San Joaquin and Tulare Lake hydrologic regions that can contribute to ecosystem restoration, water supply reliability, and water quality improvements. DWR is conducting stakeholder interviews to formulate groundwater opportunities and will then perform technical evaluations and modeling. The opportunities report is scheduled to be available early 2005 and the alternatives report, in fall 2005.

- *Groundwater storage will work, but none of the projects will work without additional surface storage. Surface storage should be prioritized.*
- *There are two problems regarding groundwater storage: surface storage capacity and conveyance capacity. It is difficult to find additional capacity in the system at times when it is needed. Groundwater can help from an operational perspective, but the priority should remain on surface water storage.*
- *Does the groundwater evaluation affect the schedule or funding of surface storage investigation?*
- *Do only what the California Environmental Quality Act requires for evaluating surface storage. Keep funding focused on the surface storage evaluation.*
- *There is a strong interest in groundwater storage at the irrigation district level.*
- *Groundwater recharge is what is needed throughout the basin.*
- *Look at flood control projects on ephemeral streams to increase recharge potential.*
- *New surface water storage and groundwater programs will take years to implement, but there is a need to increase recharge now for continued use of resource.*
- *River restoration studies need to move along.*
- *Work together, but keep groundwater and surface storage investigations separate.*
- *Will there be workshops covering groundwater storage?*
- *Canal capacities could limit the functional equivalence of groundwater to surface storage.*

Surface Storage Options Screening

Bill Swanson presented the screening approach for the remaining options. The team narrowed the range of sizes for each potential reservoir based on hydropower effects, environmental considerations and cost. The team narrowed the size ranges under consideration for each option.

- *Where/how is the Federal Energy Regulatory Commission involved? Can other cooperating agencies be added to the list?*

- *Have cost estimates been done for the options?*
- *The study should consider water temperature, how surface storage size and shape affect temperature control, and the dissolved oxygen-temperature relationship.*
- *Do “environmental resources” also include cultural and recreation?*
- *Has the study team looked at combining the options yet?*
- *Consider how cold water could be conveyed from upstream reservoirs to downstream areas.*
- *Operations must be well understood to examine water quality issues.*

Hydropower Considerations

Bill Swanson summarized hydropower considerations, including the hydropower baseline, potential power generation and use, and options that avoid power impacts. The baseline was established using historic generation data from 1922 to 2002. The team estimated hydropower generation lost and gained from each option.

- *Did you consider the useful life of the powerhouses in the analysis?*
- *How big is the impact of including increased power at Friant?*
- *Storage upstream could help create a higher head at Friant.*
- *Are there costs evaluated for power options?*
- *Would cofferdams be needed even where tunnels exist?*
- *Have you looked at how long power projects would be without power?*
- *Investigate Fine Gold as necessary, but be aware that public objection could be substantial. Other options may make more sense. Further upstream options may have the same problems.*
- *What about a tunnel between Fine Gold and Redinger?*
- *While there are successes associated with hydropower licensing processes, isn't it difficult to license a new hydro project? When was the last time a new project was licensed successfully?*

Flood Damage Reduction Evaluation

The Flood Damage Reduction Evaluation will estimate the potential benefits of new dedicated flood storage in the entire San Joaquin River Basin. It will identify changes in predicted flood damages to residential, commercial, and agricultural land uses. The team will use DWR and Corps models to identify hydraulic effects and estimate flood damages. The first step in the evaluation is to establish the baseline condition, and the next steps include: simulating the effects of additional storage at Friant, identifying extent of downstream hydraulic effects, estimating changes in flood damages, and considering other types of flood management actions.

- *Would altering sediment transport and other geomorphic characteristics help with flood control?*
- *There is a dispute regarding the 1% event. Use the raw data to avoid conflicts with other studies.*
- *Flood plains are naturally part of the river channel. Can you look at removing damageable features from flood plain?*
- *Do you compare the cost of flood protection provided via one means to the cost of providing that protection another way?*
- *Does this study take into account the flood damage effects of invasive species and other channel features?*
- *The 1997 event put 60,000 cfs down river – be realistic about benefits and effects.*

Development of Operational Scenarios

Walt Bourez previewed the process for developing operational scenarios. This process will include incorporating related work where possible, developing the analytical approach, and identifying issues to resolve. To begin development, the team needs to identify the key decision points for operations and adequately understand the range of scenarios.

- *How will you get quantities for operation assumptions (e.g., restoration, conjunctive mgt.)?*
- *Is there enough water to reach the Delta if you release it downstream?*
- *Do operations analysis tools also measure water quality? Including temperature?*
- *Water can heat up significantly on its way to Merced confluence.*
- *How much weight are you giving the litigation?*
- *Some of the related studies are relatively undeveloped and are not yet reality-tested.*
- *It may be more effective to approach this from a “limiting factors” standpoint than from a sensitivity standpoint.*
- *Are you looking at changes in operations that would require an EIR?*
- *Provide sensitivity analyses for each decision point, and then the public could provide input.*
- *Get input from cooperating agencies on operations questions and analysis.*
- *Provide more information on formation, schedule, and membership of stakeholder outreach groups.*
- *An “interdependencies” discussion would be useful in the Alternatives Report (a matrix).*

Next Steps

The next steps include:

- Continue identifying groundwater options;
- Continue screening surface storage options and performing analyses;
- Develop operational scenarios for storage options; and
- Work on alternatives report.

The next public meeting will be scheduled for fall 2004.

Attendees

Workshop Participant

Jon Basila
Tom Boardman
John Brooks
Steve Burke
David Cehrs
Jim Cobb
Lauren Corkins
Valerie Curley
Bill DeLain
Nannette Engelbrite
Paul Ervin
Ben Ewell
Tim Fahey
Dennis Fox
Jack Fry
Lyn Garver
John Goodfellow
Steve Haze
Randy Houk
Peter Jacobsen
Marlene Johnson
Norman Kuhr
Paula Landis
Anita Lodge
Bill Loudermilk
Bill Luce
Greg Martella
Orvil McKinnis
Jeff McLain
Chris Montoya
Steve Ottemoeller
Phil Pierre
Donald Price
George Redd
Kevin Richardson

Organization

SunMaid Raisin Growers of California
San Luis and Delta Mendota Water Authority
U.S. Fish and Wildlife Service
Friends of the River

Resource Management Coalition
Congressman Nunes (Office)
Reclamation
Southern California Edison
Reclamation
North Fork Rancheria
Landowner
TMR
SWCS

Kings River Conservation District
Table Mountain Rancheria
Millerton Area Watershed Coalition
Columbia Canal Company
Metropolitan Water District
Reclamation (Denver)
Chowchilla-Redtop
Department of Water Resources
Homeowner
California Department of Fish & Game
Reclamation
Santa Rosa Rancheria
Westlands Water District
NOAA Fisheries
Department of Water Resources
Madera Irrigation District
Root Creek Water District
Pacific Gas & Electric
Southern California Edison
Army Corps of Engineers

Tracy Rowland	Bureau of Land Management
Mario Santoyo	Friant Water Users Authority
Kevin Shakespeare	Congressman Devin Nunes (Office)
Al Solis	Sol Development Association, LLC
Jim Staker	SJRECWA/SLCC
Ernie Taylor	Department of Water Resources
Jack Thomson	
Igal Treibatch	Greenleaf Orchards
Chris Valdez	Congressman George Radanovich (Office)
Havier Van Tran	Western Area Power Administration
Doug Welch	Chowchilla Water District
Cindy Whelan	Sierra National Forest

Study Team Members Present

Reclamation	Jason Phillips
DWR	Mark Cowin Steve Roberts Waiman Yip
PAM	Charles Gardiner
MWH	Eric Clyde Jamil Ibrahim Ryan Murdock Stephen Osgood Foster Pelton Bill Swanson
Schlumberger Water Services	Anthony Saracino Susan Tatayon Gwyn-Mohr Tully
MBK	Walt Bourez
Curalium Consulting	Coral Cavanagh
CDM	Paula Orlando Gina Veronese